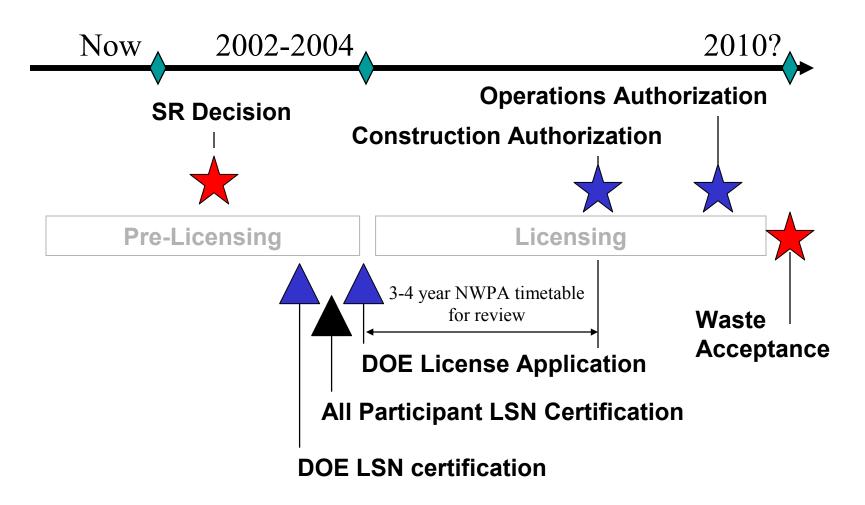
RIC 2002 Session W3 "Waste"

Step-Wise Repository Licensing

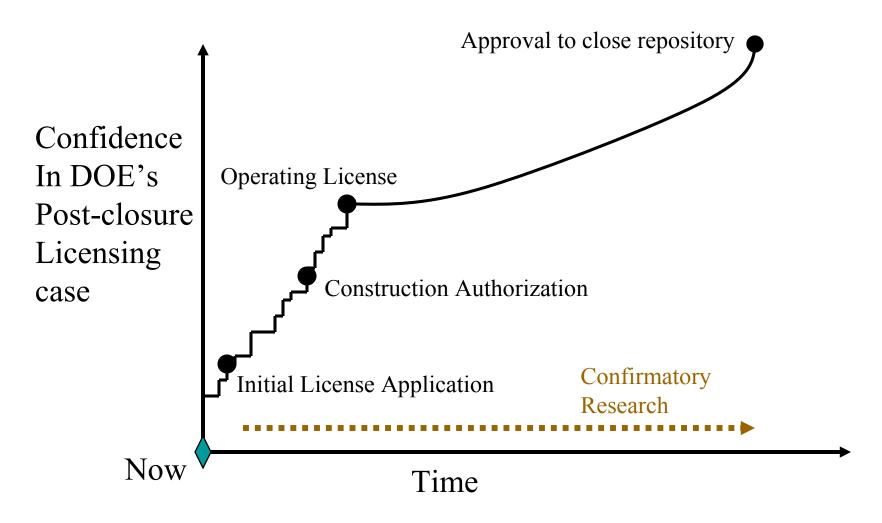
Steven P. Kraft
Director, Fuel Supply and
Used Fuel Management
Nuclear Energy Institute
March 6, 2002



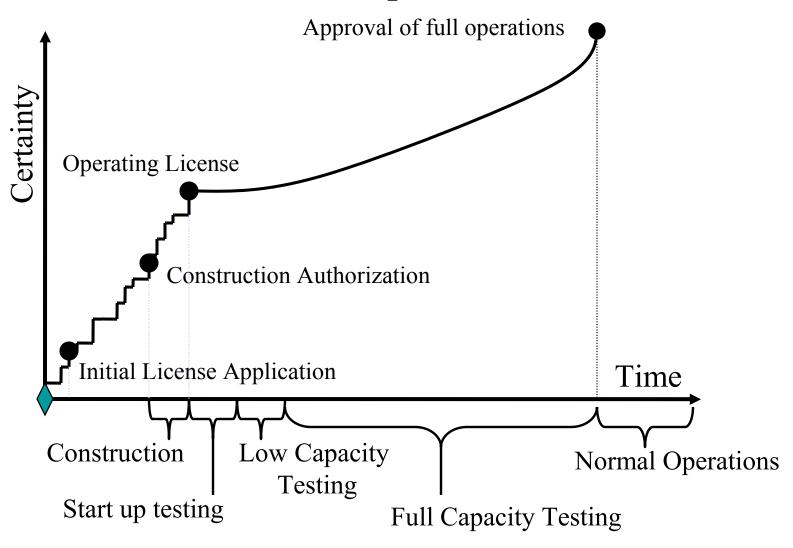
Yucca Licensing Schedule Current NEI Expectation if Yucca Mountain Approved



Step-wise licensing



Step-wise licensing Reactor equivalents



Steps Nuclear Waste Policy Act

- Study of candidate sites (1982 1986)
- Selection of site(s) to characterize (1987)
- Site characterization (1987 2001)
- Site approval (2002)
- Licensing (2002 2050/2300)
 - DOE application
 - Construction Authorization
 - Operations Authorization
 - Performance Confirmation
 - Amendment to close the repository

Step-wise Scientific and Societal Decision-making

- Even when the (repository) design has been accepted, continued research should be carried out to better understand the expected performance and to develop alternatives and improvements. These steps should continue through the life of the program, including construction, waste emplacement, and final sealing." *NAS 1983*
- "For both scientific and societal reasons, national programs should proceed in a phased or stepwise manner." *NAS 2001*

Conclusion

- Safe and timely implementation of disposal is an important national energy, environment, and security objective
- A risk-informed, step-wise licensing process can facilitate safe and timely implementation
- Licensing a repository in time to meet or beat a 2010 date for waste acceptance will be difficult but is not impossible